Recipes

Find a recipe for 4 people and rewrite it for 8 people, e.g.

4 people	8 people
125g flour	250g flour
50g butter	100g butter
75g sugar	150g sugar
30ml treacle	60ml treacle
1 teaspoon ginger	2 teaspoons ginger

Can you rewrite it for 3 or 6 people? Or 25 people? Can you convert it into ounces?

Fours

-Use exactly four 4s each time.

- You can add, subtract, multiply or divide them.

- Can you make each number from 1 to 100?

- Here are some ways of making the first two numbers.

$$1 = (4 + 4)/(4 + 4)$$

$$2 = 4/4 + 4/4$$

Journeys .

Ask your child to work out how long it would take to travel to some places in England if you travelled at an average of 60 miles per hour, i.e. 1 mile per minute, e.g.

York to Preston: 90 miles 1 hour 30 minutes
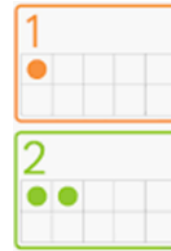
York to Dover: 280 miles 4 hours 40 minutes

How many km is it away from home? Convert from miles to km.

Times Tables and number bonds. Please ensure your child has the opportunity to regularly use on line sites which support the quick recall of number facts:

https://www.topmarks.co.uk/maths-games/hit-the-button   HIT the Button

https://play.ttrockstars.com/auth   Times Tables Rockstars.

Year 6

Achieving excellence through the pursuit

A Booklet for Parents.
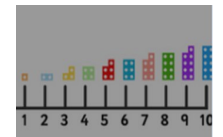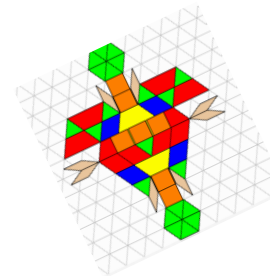
Help your child with mathematics.

Year 6 Targets.

By the end of Year 6, most children should be able to:

⇒ Read, write, order and compare numbers to at least 10 million

⇒ Interpret negative numbers in context and calculate intervals across zero

⇒ Round any number to the required degree of accuracy

⇒ Use long multiplication to multiply 4 digit numbers by 2 digit numbers.

⇒ Use long division to divide larger numbers

⇒ Identify common factors, multiples and prime numbers

⇒ Solve addition and subtraction multi step problems

⇒ Simplify fractions

⇒ Add and subtract fractions with different denominators

⇒ Multiply fractions

Activities to do at home

One million pounds

- Assume you have £1 000 000 to spend or give away.
- Plan with your child what to do with it, down to the last penny

Favourite food

- Ask your child the cost of a favourite item of food.
- Ask them to work out what 17 of them would cost, or 28, or 59.
- How much change would there be from £50 or £500
- Repeat with his / her least favourite food.
- What is the difference in cost between the two?

Sale of the century

- When you go shopping, or see a shop with a sale on, ask

your child to work out what some items would cost with:

50% off

25% off

10% off

5% off

15% off

 - Ask your child to explain how he/she worked it out.

TV addicts

- Ask your child to keep a record of how long he / she watches teach day for a week. Then ask him / her to do this.
- Work out the total watching time for the week.
- Work out the average watching time for a day
- Instead of watching TV, you could ask them to keep a record of
- time spent eating meals, or playing outdoors, or anything else they do each day. Then work out the daily average.

Questions you could ask your child as they are doing their Mathematics.

- What is the same or different about these numbers, sums, processes?
- How could you organise your learning?
- Can you show me an example?
- What are the connections between...?
- What do you notice?
- When is it not true?
- Can you find another example?
- Can you find an example that does not work?
- How can you be sure?
- What question can you ask next?
- Can you explain why that happens?
- Can you describe...?
- Can you do this mentally?

⇒ Multiply and divide decimals

⇒ Use equivalences between percentages, fractions and decimals

⇒ Construct and interpret pie charts

⇒ Calculate the mean as an average

⇒ Make nets of 2-d shapes

⇒ Illustrate and name parts of circles including radius, diameter and circumference

⇒ Use coordinates in all 4 quadrants

⇒ Draw, translate and reflect shapes in different axes

⇒ Convert miles and km

⇒ Calculate the area of parallelograms and triangles

⇒ Calculate the volume of cubes and cuboids

⇒ Express missing number problems algebraically.

⇒ **These are examples of some of the mathematical targets your child is working towards this year.**

Standard Methods for the four operations.

ADDITION

column addition above and beyond 4 digits and including decimals.

e.g.

```
  83        54.6       4321
+ 42      + 25.9      + 3959
 120        80.5       8280
   5         11          11
 125
```

```
  5 6 5 7 2 3
+ 3 7 3 6 2 7
  9 3 9 3 5 0
  1     1   1
```

SUBTRACTION

column subtraction above and beyond 4 digits and including decimals.

e.g.

```
  4.9       1.2        4 7
- 1.7      23.1      6 5.1 8.2
  3.2      -157      -  4836
            74         60346
```

```
  5 6 5 7 2 3
- 3 7 3 6 2 7
  1 9 2 0 9 6
```

MULTIPLICATION

1) short multiplication methods

e.g.

```
  49         49        345
X  2       X  2       x   5
  18         98       1725
  80          1         22
  98
```

2) Long multiplication method

e.g.

```
   345
 X  53
  1035   (345x3)
  1 1
 17250   (345 x50)
  2 2
 18285
```

```
    4 1 2 2 3
 X        1 4
  1 6 4 8 9 2
  4 1 2 2 3 0
  5 7 7 1 2 2
        1 1
```

DIVISION

1) short division

e.g.
```
    26
 7)18.2
```

2) short division with remainders

e.g.
```
      92 r 3    or 92 3/5 or decimal 92.6
 5)46.3
```

3) Long division

```
     28 r 12              28 r 12
 15)432              15) 432
    300                  -30
    132                  132
    120                  -120
     12                   12
```

```
        0 0 5 4 3
 2 4)1 3 0 3 2
    -1 2 0↓
     0+0 3
   -    9 6↓
        0 7 2
   -      7 2
          0 0
```

```
   2 4
   4 8
   7 2
   9 6
 1 2 0
```